DR. JOHN GUITERAS, who resigned the chair of pathology in the University of Pennsylvania to fill a similar position in the University of Havana, has established there a journal entitled *Revista de Medicina Tropical.*

DISCUSSION AND CORRESPONDENCE.

THREE FORGOTTEN NAMES FOR BIRDS.

IN *Museum Leskeanum Regnum animale quod ordine systematico disposuit atque descripsit*, D. L. Gustavus Karsten, Vol. I., Leipzig, are proposed three names for birds which appear to have been overlooked by ornithologists, at least since 1817. The names are *Certhia longicauda*, *Trochilus maximus*, and *Pipra tricolor*, all of Karsten. Viellot (*Nouveau Dictionnaire d'Histoire Naturelle*, * * * Nouv. ed., T. VII. (1817), p. 364) refers to *Trochilus maximus* giving the proper reference to Karsten's work, but curiously enough gives Latham as the authority for the species.

While these names have not been noted in recent works it seems they do not affect any now in use in ornithologic nomenclature. This statement is made on the authority of Mr. Witmer Stone of this Academy.

From a bibliographic standpoint it would be interesting to know whether the *Museum Leskeanum Regnum Animale* (1798) consists of one or two volumes. Most bibliographers, to whom I have referred, say two volumes; but Cuvier (*Le Regne Animal*, nouv. ed., T. III. (1830) gives but one volume. In the library of the Academy of Natural Sciences of Philadelphia there is volume I. only of the work, which is divided into six classes, viz, Mammalia, Aves, Amphibia, Pisces, Insecta, Vermes, the latter including the invertebrates except the insects, from which it will appear evident that nothing remains of Animalia to be treated in another volume. The first 44 pages (classes I.–IV.) of the work are numbered in Roman, and parts V. and VI. are numbered independently, and are in Arabic (pp. 1–320). To this difference in pagination may be due the statement that the work is in two volumes. Or the fact that Classes V., Insecta (pp. 1–136), was published in advance in 1788 with a separate title-page may account for the other volume.

WILLIAM J. FOX.
ACADEMY OF NATURAL SCIENCES, PHILADELPHIA.

NOTES ON INORGANIC CHEMISTRY.

THERE has been a question frequently discussed as to the delicacy of spectroscopic reactions as compared with the sense of smell. Kirchhoff and Bunsen were able by the spectroscope to detect $1/14 \times 10^{-6}$ mg. of sodium; on the other hand, E. Fischer and Penzoldt could recognize the odor of $1/460 \times 10^{-6}$ mg. of mercaptan. It was clear, however, that the figures of Bunsen by no means represented the limit, and Professor F. Emich of the Technische Hochschule of Graz has lately devoted some time to the study of the problem. His results are published in the *Sitzungsberichte* of the Academy of Science of Vienna. His method is to use Geissler tubes with exceedingly fine capillary portion; these are filled with hydrogen under greatly diminished pressure. A slit at right angles to the capillary allows the light from a limited portion of substance to pass, the weight of which is easily calculated. The lowest pressure at which the line *H* is visible was observed and from this the calculation made. The results obtained in three observations were 1×10^{-12} mg., 7×10^{-14} mg. and 3×10^{-13} mg. It thus appears that, on the average, the quantity of hydrogen recognizable by the spectroscope is ten thousand times less than that of mercaptan by the sense of smell. Emich calls attention to the fact that if, as Hutton affirms, the ordinary hydrogen spectrum is visible only when the gas contains a trace of oxygen, the quantity of oxygen thus detected by the spectroscope becomes far more minute than the figures given for hydrogen.

THE subject of the radio-active substances in pitchblende continues to excite the interest of chemists, and much work is being done by the two Curies, Giesel, Debierne, Becquerel, von Lengyel and others. The last number of the *Chemical News* contains a paper by Béla von Lengyel of Budapest, describing his efforts to prepare a radio-active barium synthetically. His process is to fuse together uranyl nitrate with two or three per cent. of barium nitrate, and then fuse the oxides obtained in the electric arc. The fused mass is dissolved in nitric acid, much of the barium nitrate crystallized out, and the remainder of the barium precipitated as the sulfate. The sulfate thus obtained